

### **Abstract of the Disclosure**

Pervasive output capability is provided so that an information apparatus can pervasively output digital content to an output device regardless of the processing power, display screen size and memory space of the information apparatus. This allows small mobile devices with limited display, processing power, and memory to be able to output a digital document (e.g., PDF, HTML, PowerPoint etc) in its full original richness, without resorting to downsizing, truncating, reducing, clipping or otherwise altering the original document. Data output server software in computer readable medium may include software for receiving at a server a document object corresponding to output content managed with an information apparatus, and software for receiving at the server an output device object with one or more attributes corresponding to an output device for rendering the output content, the server being distinct from the information apparatus and the output device. There may also be software for generating output data employing at least partly the document object and the output device object, the output data relating to the output content for rendering at the output device, and software for transmitting the output data for rendering of the output content at the output device.